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ORIGINAL DEPARTMENT.

LECTURE.

A CLINICAL LECTURE ON A CASE OF DOUBLE HEMIPLEGIA, DEPENDENT UPON CEREBRAL EMBOLISM.

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REPORTED BY FRANK WOODBURY, M. D.

I expect to occupy most of the hour this morning with some remarks on a case of more than usual interest, not only because the diagnosis has presented many difficulties, but also because the lesion upon which the paralysis depends is rather a rare one. The patient is now suffering from hemiplegia of the right side, together with ataxic aphasia, but the remarkable feature of the case is that the attack came on as he was recovering from a similar affection of the left side. Most of the patient's history, which I shall now read, was obtained from his wife, by Dr. Gerhard, as he himself was unable, when admitted to the hospital, to give a full account of himself:—

John McA., set. 44; married; laborer; was admitted to the medical wards of the Pennsylvania Hospital April 7th, 1875. He has been married twelve years, and has had five children, one of whom died of measles, when young, but the others are alive and in good health. He denies ever having had any venereal disease, and there is nothing in his present condition or previous history at all suggestive of syphilis as the cause of his present condition. His first serious illness occurred about seven years ago, when he had acute articular rheumatism. Two years ago he had a second attack, and since then he has presented symptoms referable to the heart, such as palpitation and dyspncea. In

April, 1874, he began to suffer from headache and impairment of memory, and in the early part of May, following, he awoke one night suffering from intense vertigo. His wife observed that he was sweating profusely, and that he had lost all power of motion in the left arm and leg. His mouth was drawn to the left side; there was ptosis of the left lid, and strabismus of one of his eyes, his wife does not recollect which. His mind was a good deal affected after this attack, but he did not complain of headache. There appears to have been some impairment of vision, lasting for about six months. In three or four months the power of motion returned, so that he was able to go about with the assistance of a cane. His eyesight and memory also improved.

On the 19th of March, 1875, after rising from the dinner table, he suddenly fell to the floor, but did not lose consciousness. Upon helping him up, his wife found that he was completely paralyzed on the right side; he was also speechless, but this seems to have been due to paralysis of the vocal organs, and in no degree to loss of memory for words. Three days after the attack he could speak, but he was occasionally delirious. No headache or any other evidence of cerebral excitement followed.

On admission, there is weakness of the left arm and leg, together with complete motor-paralysis of the right side, there being also some contraction of the flexors of the right hand and of the biceps of the same side. The mouth is drawn somewhat to the left, and the tongue deflected to the right. The pupils both respond fairly well to light. There is slight convergent strabismus of the right eye, but no paralysis of any of the muscles of the left. Intellection is exceedingly feeble, but there is no headache. The lungs are healthy. The examination of the heart re-

veals a short high-pitched murmur, systolic in time, and loudest over the apex of the heart, but heard, although faintly, over other parts of the praecordial region and in the left axilla. The pulse is feeble and irregular in rhythm and force. There is no trouble with the bowels or bladder. The urine is acid and pale in color; it does not contain albumen; its specific gravity is 1004. He was ordered iodide of potassium in twenty grain doses, three times daily.

April 12th. Has gained strength in left arm and leg, but paralysis of right side remains unchanged.

April 14th. Better. He takes notice of what is going on about him, and can move the right arm and leg very little. Cardiac murmur is much more distinct; pulse stronger and more regular. The examination of the eyes with the ophthalmoscope yields only negative results.

There is, therefore, in this case, double hemiplegia, paradoxical as the expression may seem to you. The paralysis of the right side was complete at first, involving the muscles of the face as well as those of the limbs, and came on ten months after the loss of motion on the left side, and just as there was reason to believe this was disappearing. Sensation does not appear to have been ever much, if at all, impaired. There was some confusion of the intellect immediately after each attack, which continued after the last for some days, but at no time was there loss of consciousness.

The case requires study, and even after taking into consideration all its features, it is not easy to come to a conclusion in regard to its nature. In the first place, I do not believe the paralysis is due to apoplexy; for the patient, although somewhat past middle-life, does not present the appearance of age. Neither is there evidence of atheroma of the arteries accessible to the finger, and this furnishes at least presumptive evidence that this disease has not invaded the cerebral vessels. Moreover, it is, to say the least, unusual to have an effusion of blood causing paralysis so complete as existed in this case, without, at the same time, loss of consciousness. Again, in the immense majority of cases, the second effusion of blood takes place into the original foyer, because it is here that the vessels are weakest, and, therefore, most liable to give way. This fact does not render the existence of apoplexy impossible; it makes it, however, in my opinion, unlikely.

Secondly. Is there any reason to regard the

paralysis as a consequence of constitutional syphilis? I think not, for the following reasons: The patient asserts most positively, and with apparent honesty, that he has never had venereal disease in any form. A denial of this kind would go for very little in the face of symptoms which could only be explained by referring them to this disease, but we have not in this case, and there has apparently never been, any such symptoms. A diligent search has failed to detect the presence of a cicatrix on his penis, and no cicatrices can be found on any other part of his body. He has no enlarged glands, and has never suffered from sore throat, pains in the bones, or falling of the hair. In addition to which he has four healthy children living, the youngest of whom is only twenty months old—an age which renders it improbable that he is now suffering from the effects of syphilis contracted since its birth. Moreover, there is nothing in the histories of the two attacks of paralysis at all resembling what occurs in syphilitic disease of the brain. As a general rule in this disease, the patient suffers, some time before the occurrence of paralysis, from headache, and possibly from some mental disturbance. The loss of power is gradual, not sudden, as in this case. You will remember a patient whom I brought before you a few months ago, with complete paralysis of the left side. In this case there could be no doubt of its syphilitic origin, for the patient had lost some of the bones of the nose and part of the soft palate, and the symptoms yielded when specific treatment was employed. But how different was the mode of approach of the paralysis. First, after a good deal of cephalgia, a slight loss of power in the hand, a mere inability to carry a cup of tea steadily to her lips. Then a gradual deepening of the paralysis and an extension of it to the leg. Three days later she was still able to walk, supported on both sides, from the reception room to the ward, a distance of about four hundred feet. I placed her upon moderate doses of the iodide of potassium, in spite of which she gradually became worse, and more helpless, until, fearing the supervention of coma, and possibly of death, I increased the amount of the drug to thirty grains three times a day, upon which a rapid improvement took place. In the case before you, we have had two attacks of paralysis, both coming on without warning, which I repeat is not usual in cases of syphilitic disease of the brain, and has certainly

never happened in any of the many cases I have had under my care. Moreover, it is scarcely conceivable that one side of the brain should first be affected from this cause, and then, at an interval of more than ten months, the other side, the part first affected apparently getting well between times, and that, too, without the use of anti-syphilitic remedies. There is, however, one point in the case which may be regarded, not, it is true, as positive proof, but as strong evidence against the existence of an intra-cranial tumor of any kind. I allude to the fact that the ophthalmoscope does not reveal the existence of choking of the optic discs. This has been found in so large a percentage of these cases, that its absence in this particular case, when taken in connection with the fact that there is nothing in the history of the patient indicating that he ever had syphilis, confirms me in my opinion that the lesion is not of a specific character. The same process of reasoning will enable you to exclude from consideration all the other varieties of intra-cranial tumors.

Before going further, it will be proper to call your attention to the fact that the urine is healthy, containing neither albumen nor any other abnormal constituent, and that there is no evidence of disease of any of the thoracic or abdominal organs, with a single exception, the heart. It is, therefore, impossible that the paralysis is dependent upon reflected irritation; indeed, it is much too extensive for this explanation to be satisfactory under any circumstance. I think we must, therefore, seek in the single organ of the body which is manifestly diseased the cause of the patient's present condition. I have told you that the pulse is feeble, and that it is irregular in rhythm and force. I further find, upon comparing the pulsations at the wrist with those of the apex of the heart, that the latter are much more numerous. This not only indicates disease of the heart, but it points to the mitral valve as being the seat of that disease. The increased area of percussion dullness in the precordial region shows us that there is cardiac hypertrophy, and yet when I placed my ear over the heart I failed, for a long time, to distinguish a murmur, and when detected, it was of feeble intensity. It was heard best at the apex, was short, and remarkably high in pitch. As the patient has gained strength it has become louder, and is now heard in all parts of the precordial region, and in the left axilla, but it remains loudest at the

apex of the heart. I have said that the mitral valve was the seat of disease; the murmur indicates this with sufficient distinctness. I believe that in addition to insufficiency of the valve, there is also some constriction of the orifice. It is true that there is no pre-systolic murmur, but this may be explained by the feebleness of the heart's action. I base my diagnosis, therefore, upon the character of the murmur which is heard. This, instead of being low in pitch and of soft quality, is harsh and high, indicating that the blood, in escaping from the ventricle into the auricle, passes through a narrowed and probably funnel-shaped orifice.

Taking this condition of the mitral orifice into consideration, what is more probable than that there are either vegetations upon the valve, or that clots have formed upon it, either of which admit of being detached and swept on into the current of the circulation, until it is arrested in an artery, the calibre of which it completely fills. You know that the cerebral arteries are occasionally occluded in this way, and this I believe to have taken place in the case before you. Let us see whether all the symptoms can be explained by referring them to this cause. The headache which preceded the first attack of hemiplegia may have been accidental, or what is still more likely, was dependent upon the anæmia of the brain caused by the feeble circulation. It might, indeed, indicate organic disease, but there is nothing to show that such is the case. The attack itself was characteristic of cerebral embolism. It was sudden and accompanied by vertigo, and by some temporary confusion of the intellect, but not by positive loss of consciousness. It is, of course, rare to find first one side of the body affected from this cause and then the other, but if we may find the spleen, as we often do, studded with embolic patches, there is no difficulty in supposing that more than one embolus may occasionally find its way into the brain, shutting off the access of the blood to a part of the organ, which will vary in extent, in accordance with the size of the obstructed vessel. So, too, will there be a difference in the loss of power. If the vessel plugged by the embolus be a small one, the paralysis will be incomplete, and, perhaps, limited to one limb. If it be a large one, it will be complete, as in the present case. But as you can readily understand, the paralysis, when it has once occurred, has no tendency to become greater.

I have met, in the course of my practice, with

at least four other cases of embolism. The first case occurred in the winter of 1860-61, and is fully reported in the Proceedings of the Pathological Society of this city, vol. ii, p. 134. The patient was a girl, 11 years of age, who, after having been under my care for a few days, for valvular disease, was suddenly seized with intense pain in the right leg. An examination showed that no pulse could be felt below the groin, and I was, therefore, able to diagnosticate embolism of the iliac artery of that side, which was found at the autopsy. The second case is also reported in the same series, vol. ii, p. 224, and although, in consequence of the want of care with which the post-mortem examination was made, no occlusion of any of the cerebral arteries was detected, I have never had any doubt of its existence; for, in addition to the symptoms pointing unmistakably to this as the cause of the paralysis, numerous embolic patches in the kidneys and spleen, as well as vegetations on the mitral valve, were found after death. The third case is still under my care, at the Children's Hospital, in this city. The patient, a young girl, set. 11, was discovered, shortly after her admission for a surgical affection, to have extensive disease of the heart, there being, it was thought, constriction and insufficiency of the mitral orifice. It was observed, one day, that she had lost the use of the left arm and leg, and that the face was drawn to the right. For a long time her life hung in the balance, but, perhaps owing more to good nursing than to any other cause, she still lives, although there continues to be partial paralysis of the left side, the usefulness of the limbs being still further interfered with by the contraction of some of the muscles, which has taken place. The fourth case was also one of cerebral embolism, in which there was only partial paralysis, and which was chiefly remarkable for the great emotional disturbance which occurred at the time of the attack. Like the patient before you, he had a second attack, which, however, affected the same side as the first.

I have left myself but little time to speak of the treatment of the case, and indeed there is little to be said on this point. The feeble pulse is an indication for the employment of tonics and good diet. It occurred to me, shortly after the patient came under my care, that it might be well to place him on large doses of the iodide of potassium, 3ss. thrice daily. My object in doing this was to effect, if possible, some improve-

ment in the condition of the mitral orifice, and by rendering the blood alkaline to prevent the formation of any further clots, and possibly to bring about the solution of those already existing. This treatment may be false in theory, but it has been so far attended with success, and I therefore feel myself justified in continuing it.

Before closing, I will call your attention to the fact that, although I suspected the existence of valvular disease it was some time before I heard a cardiac murmur. As the patient has gained strength, this has increased in intensity, until now it is heard distinctly all over the precordial region and in the left axilla. I have noticed this in other cases, and recollect a patient, whom I saw only in a dying condition, and in whom I failed to detect a murmur, even after careful auscultation. Notwithstanding which, extensive disease of the valves was found, after death. Therefore, you must remember that when the heart is acting feebly a murmur may not be heard, even where every other circumstance seems to favor its occurrence!

NOTE.—May 14th. Since the above lecture was delivered, a great improvement in the patient's condition has taken place. He can now sit up in bed without assistance, and is able to move the right arm and leg; the former, however, much more readily than the latter. It is noteworthy, too, that he was able to flex and extend the fingers before he could move the hand or forearm, and that motion returned to these parts before it did to the shoulder. In the lower extremity the same order was observed in the resumption of their functions by the various joints. Inasmuch as in the other three cases of cerebral embolism, referred to in the lecture, motion returned to the arm first, and to the muscles of the fingers and toes while the patients were still unable to move those nearer the trunk, and as this is exactly the reverse of what takes place in hemiplegia from apoplexy, we appear to have an additional means, to those given above, of distinguishing one form of paralysis from the other.

J. H. H.

COMMUNICATIONS.

A SINGULAR CASE OF LONG CONTINUED VOMITING.

BY L. C. BUTLER, M. D.,
Of Essex, Vermont.

Nearly seven years ago the following paper was read before the Vermont State Medical Society. It is now published, in order to connect with it the *post-mortem* examination, which furnishes the solution of the mysterious problem.

Mrs. F. B., widow, aged 53; seamstress by trade; the mother of several children; nervous temperament, dark, sallow complexion; free from hereditary predisposition to disease, though a sister has a tumor of the breast which has been thought to be cancerous; has had vomiting at irregular periods for the last eleven

years, sometimes five, six or eight during the year; recently more frequently, occurring once a month and oftener. Previous to the first attack of vomiting, she had been pressing a coat, the process requiring considerable exertion of the muscles of the arms and chest, and felt something give way in her stomach. To that occurrence she attributed this attack of vomiting, which lasted for some days. She has been subject for many years to periodical attacks of sick headache, but was never sufficiently nauseated to produce vomiting, without taking something to produce it, until the time just mentioned.

The symptoms immediately preceding these attacks are, pain over and in the left eye, extending down the left side to the stomach; pressure at the stomach, as though overloaded, with a bloating sensation; restless nights; obliged to lie with arms elevated above the head, so as to relieve the pressure upon the stomach and liver; slight nausea; vomiting comes on suddenly, and continues, with slight intermissions, for hours, and sometimes for days. During vomiting, a cold, clammy sweat starts out all over the body, attended by a death-like prostration of the whole system, with great dejection of spirits and almost entire loss of voice at times. The urine is scanty, and though never examined microscopically or with any of the ordinary tests, yet exhibits to the eye the appearance of being loaded with foreign matters. The substance first vomited is a glairy mucus, resembling the white of an egg, with sometimes the appearance of ill-formed pus; then a greenish substance appears, resembling the pigment of bile, followed by a black mass mixed with and streaking the former, like fine coffee-grounds partially dissolved and commingled. At times, it has the appearance of grumous blood, or broken-down liver, and is ejected in masses. The quantity is large, amounting generally to two or three quarts, and occasionally more. The vomiting is followed by a raw, burning sensation in the stomach and esophagus, which soon subsides, and convalescence rapidly succeeds. There is no smell or taste to the substance vomited, save, as she describes it, a salty taste. When once the black matter is reached, which, it seems to her, comes from the region of the liver, and not till then, she is relieved, and the stomach recovers its tone, tolerating and digesting at once every kind of food her appetite craves, such as boiled eggs, pickles, beefsteak, etc. Recovery is so

rapid, that from being utterly prostrate, unable to speak, or scarcely to raise a hand, one day, she will visit her neighbors, or attend to quite heavy work in less than twenty-four hours after the vomiting ceases.

During the first attacks of vomiting, she took repeated emetics, some thirty in twelve weeks, among them twelve of lobelia. Occasionally, on taking the emetics, she vomited blood, owing, doubtless, to their violent action.

The vomiting had no connection with menstruation. The menstrual function was regular and independent of the vomiting. Nor did it cease with the cessation of that function, seven years ago, but has continued on, increasing somewhat in frequency and in violence, and exhibiting no change in the substance ejected, save that immediately upon the cessation of the menses she vomited fresh blood for the first and only time during its progress. Her natural habit is costive, the bowels seldom moving without being provoked to it by medicine. Yet sometimes, when the vomiting ceases, a voluntary discharge takes place, of a substance resembling pus.

A case in many respects so anomalous, and so persistent in spite of treatment, has, of course, tested the skill and brains of many physicians. Regular and irregular practitioners have given their opinions and their prescriptions. But the remedy has not yet been found which effects the cure. Opinions differ. Doctors disagree, both as to the diagnosis, pathology and treatment. Some say it is a breaking down of the villous coat of the stomach. If this be so, pray how long will it take, with the ejection of so much broken-down mucous membrane every few weeks, to destroy the stomach altogether? Or, are the recuperative energies of nature sufficient to keep in repair this constant wasting process, so that the stomach is fully restored against the successive attacks? Others diagnosticate a vitiated secretion of the stomach, dependent upon a peculiar chemical organization of the gastric juice, accumulating by degrees, till the stomach finally will tolerate it no longer, and the vomiting follows. Akin to this is another opinion, that it is a weeping of the villous coat of the stomach, denuded by ulceration or chemical decomposition, the effused fluid coagulating and remaining till it becomes offensive. If this latter opinion be correct, it is difficult to account for the rapid recovery of tone, and vigor, and digestive power, immediately

the vomiting ceases; and also to determine why it is that the resulting product is not offensive to the smell, or has only a salvy taste. If, however, it be the result of chemical action upon the secretions of the stomach, it is easier to see how that organ might, to some extent, recover its tone and vigor rapidly when the offending substance is removed. Others, again, diagnosticate chronic ulceration of the mucous membrane, basing their opinion upon the fact that a burning sensation, as of a raw surface, invariably follows the vomiting. If this theory be correct, the process of ulceration is certainly a very accommodating one. Ordinarily, if not checked, it goes on rapidly to perforation and death. Here it has been in progress for years, and has made slight apparent headway. Others still have pronounced it to be cancerous. If so, it is a cancroid formation *sui generis*, for it exhibits none of the pathognomonic symptoms of that disorder. Others, taking into consideration the general, together with the local symptoms, have supposed the liver to be the organ more especially at fault, and the disease of the stomach to be the result of sympathy with the long-continued disease of that important viscus. And this view derives some support from the fact that whenever, under the influence of appropriate remedies, the secretions of that organ have been improved, and the obstinate costiveness removed, the periods of vomiting have been more widely separated. In one instance, under such treatment, some months intervened. Precisely what is the pathological condition of the liver, whether it be cancer, chronic congestion, nutmeg or waxy, is a point quite difficult to determine, since there are no symptoms in the case which are pathognomonic of either.

But, under any and every variation of treatment, like Banquo's ghost, the vomiting would not down at its bidding. Subdued it might apparently be for a time, or its constituents so changed as to give promise of cure, yet it would return to plague and torment, not only patient, but physician, and compel him to reconsider his opinion, and ask again, in deeper doubt, what is it? Fine-spun and neatly woven theories may be made to give plausible solutions of the mystery, but the scalpel alone will reveal the reality. That revelation I am assured will be made, for the patient herself has requested that a post mortem examination shall decide it, for the benefit of the living.

During the past seven years nearly, this case

has proceeded very much as before that period. The vomiting has continued with the same general results. The matter vomited has exhibited the same general characteristics. Her general health has been gradually failing, evidently affected by the gradual progress of the disease, which never developed itself sufficiently to enable any two of the eminent physicians who examined her case exactly to agree in their diagnosis.

For several weeks previous to her decease, the disease had evidently involved her lungs, occasioning considerable cough, and some dyspnoea. At length, while eating an egg, and remarking how good it tasted, she suddenly sank back and expired.

Agreeably to her very sensible request, a *post mortem* examination was held, about forty hours after death, in the presence of Drs. Crampton and Richardson, of Winooske, Dr. Ferrin, of Essex Junction, and myself, with medical student Lenney. Without troubling the reader with the minutiae of the examination, suffice it to say, the heart was flabby, and somewhat enlarged; its walls and columnæ were easily broken down with the pressure of the finger; In the right auricle was a large clot, nearly the size of two butternuts, a part of which was evidently recent, and a part, from its peculiar fibrous appearance, had probably been accumulating for some time. This was undoubtedly the cause of her sudden death. The lower lobe of the right lung was in a state of engorgement, advanced almost to the point of disorganization. The congestion implicated the upper lobe, and had extended across the mediastinum to the upper portion of the left lung. The spleen was too far disorganized to retain its form when disconnected with its surroundings. It was somewhat smaller than usual, and easily broke down into a mass of thin pulp. The stomach exhibited some slight abrasions of its mucous membrane, and some enlargement of its veins, but otherwise showed no signs of disease. The left lobe of the liver was, to all appearance, healthy, and was probably the only portion of the liver that performed any natural function. The gall bladder was nearly empty, but contained a brownish-colored, viscid substance, about the consistence of cream, akin to a portion of the matter she vomited. The right lobe of the liver was adherent to the diaphragm, through which disease was communicated to the lower lobe of the right lung. Its perito-

neal covering peeled off as readily and as smoothly as the rind of an orange, leaving the substance of that lobe a mass easily broken down, under the fingers, into a pulpy mass of liver tissue, portal system and bile ducts, none of which could be traced through it. It was about normal in size and weight, and exhibited to the eye the evident results of chronic congestion of long standing. Without reasonable doubt here was the *fons et origo* of the disease which had baffled the skill of so many physicians.

Originally it may have been sub-acute in its character, and may have been perpetuated by the remedies addressed to the stomach, which was generally considered to be the seat of the difficulty. This condition of the liver continued on for years. The occasional vomiting was nature's remedy for the virulence of the malady. But it only relieved the congestion temporarily, without curing it. The vitiated secretion of the liver was regurgitated into the stomach, where it acted as a foreign substance, irritating and disturbing, till it was ejected. Then the whole system was relieved, and the organs worked on again in comparative harmony. During all this long period, strange to say, the stomach did not become diseased; its functions were disturbed for the time being, but once the offender was removed it played its part again, manfully, in the organization. Food was digested, the functions of assimilation and nutrition were fairly performed; the system was fairly nourished; and by this means her existence was prolonged, till the disease had communicated itself to the citadel of life.

The question, therefore, with which this article began, so many years ago, is now solved. The *post mortem* has revealed the answer, but only in such form as to impress most emphatically the importance of careful, thorough and correct diagnosis in the earliest stages of disease.

NOTES ON MAL PERFORANT DU PIED.

BY GEORGE HALSTED BOYLAND, M. A., M. D.,
Late Surgeon in the French Army Medaillé, etc.

Mal perforant du pied of France, like mycetoma or fungus foot of India, though clinically of great importance and interest, presents many dark points as to its pathological anatomy. A certain analogy exists between these diseases, as regards their course and method of treatment.

Dr. Vandyke Carter,* in his admirable work on mycetoma, assures us that fungus foot is of parasitical nature and origin; whereas, mal perforant du pied is the product of various inflammatory processes; Paul considers this latter disease as identical with the hygroma sometimes observed on the side of the great toe. Gosselin, on the other hand, regards it as an inflammation of the partly pre-existing, partly accidentally produced bursæ mucosæ of the sole of the foot, and named the disease, therefore, dermosynovitis. Others, again, for instance, Delsol and Leplat, believe mal perforant du pied to be the result of atheromatous process of the arteries. According to Pitha, we must seek the cause of the persistency of the ulcer principally in the thickly growing epidermis at the base of it, which, by splitting and undermining its borders, works against healing. At the same time this eminent surgeon and pathologist admits that the excision of the epidermis layers is quite useless. It would be reasonable to suppose that if this disease is caused by the thickly growing epidermis, its removal would put an end to further pathological process; and therefore, this explanation cannot be right. Those above given are, on many grounds, according to Asché, inadmissible. The opinion of Estlander, who identifies mal perforant du pied with lepra anæsthetica, and who, in seventeen days, is said to have cured, a case of it with potass. iod., has not been authenticated by anatomical investigation.

Dr. A. H. Schoemaker observed a case† which is, in detail, as follows:—

A tailor, fifty years of age, leading an irregular life, noticed, twelve years previously, a red vesicle upon the planta pedis, that made its appearance without any special cause, and soon took the character of an ulcer, showing little tendency to heal. Six months later came an ulcer on the same spot, that increased in size steadily during the next five years, and only during six weeks, when the patient was suffering with typhoid fever, did it diminish a little, after which it continued to grow as before. The patient was treated for one year without any sign of improvement, being much reduced on account of the intense pain and somewhat violent bleedings from the depth of the wound. The size of the ulcer was about four square

* On Mycetoma, or the fungus disease of India. By H. Vandyke Carter, M. D., H. M. India Army. London, 1874.

† Schmidt's Jahrbücher, No. 2, 1875, p. 124.

inches; the border was of a blue-reddish hue, undermined; pressure in the vicinity of the ulcer caused very violent pain, accompanied by an exudation of bloody serum. At certain places where the border was not undermined pressure brought forth a light yellow vermiciform mass; the fourth and fifth metatarsal bones were partially implicated; the foot and lower leg were otherwise normal, the heart healthy. Schoemaker performed Pirogoff's amputation; the wound healed in six weeks.

The examination of the amputated foot showed that these light yellow masses existed not only on the borders, but also on the surface of the ulcer. Sections were made through the foot, revealing many small light yellow points scattered in every direction, out of which, upon pressure, the same light yellow mass came again; between the points large caverns were present; these were filled with a gelatinous liquid, of light yellow color. The periosteum of the fourth and fifth metatarsal bones was thickened, forcing and destroying the tissue. A microscopical test resulted in the recognition of a true epithelioma. Patches of epithelium and different kinds of cells were visible; as was also the transformation of different cells out of one cell, or one nucleus. Already, eight weeks after the healing of the amputation-wound, a vesicle appeared on the scar, which broke and left an ulcer that cauterization failed to heal. This ulcer grew larger, and the characteristic vermiciform patches of epithelium appeared on the borders; the ulcer became still larger, but did not go over on to the skin of the lower leg; continuing its course in the skin of the heel and planta pedis, which had been used as a flap in the operation. The pains were intense, and the ulcer attacked the point where tibia and os calcis had united. Amputation was performed at the lower third of the tibia, by the circular method. An examination of the amputated portion proved that the pathological process had gone up into the marrow of the tibia, affecting at the same time the pars spongiosa, both of which were changed into a yellow pulp, containing, it is true, no epithelium patches, but instead, a very fine connective tissue, in which were found different forms of cells.

That the above mentioned ulcer was an epithelioma, appears to be beyond doubt, as also the fact that the ulcer is identical with mal perforant du pied, and upon such excellent pathologi-

cal evidence we may accept this explanation as the true one, and pronounce the thus far mysterious mal perforant du pied nothing more nor less than cancer of the skin.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS, OF PHILADELPHIA.

WEDNESDAY, January 6th, 1875.

A paper was read by Dr. John Ashurst, Jr., on

Excision of the Elbow Joint.

Eight cases were narrated in detail, of which a summary was presented as follows:

No.	Name, sex, age, etc.	Nature of affection for which operation was required.	Result: duration of treatment after operation.	Remarks.
1	B. F., male, 56, blacksmith	Arthritis of left elbow	Died; 33 days	Death from exhaustion.
2	J. D., male, 25	Gelatinous arthritis of right elbow	Died; 19 weeks	Death from tuberculous meningitis.
3	J. K., female, 7	Arthritis of right elbow from injury	Recovered; 16 months	Ankylosis as to flexion and extension.
4	J. C., male, 51, wagoner	Compound fracture and dislocation of right elbow	Died; 7 days	Death from delirium tremens.
5	R. A., male, 10	Arthritis of left elbow from injury	Recovered; 4½ months	Normal motions of part restored.
6	G. P., male, 4	Arthritis of left elbow	Recovered; 9½ months	Normal motions restored.
7	J. S., male, 6	Right elbow destroyed by constitutional syphilis	Recovered; from operation; died 17 months subsequently	Death from syphilitic disease of brain.
8	C. K., male, 6	Partial fibrous ankylosis of left elbow, with recurrent arthritis	Recovered; 7½ months	Normal motions of part restored.

The speaker then continued with some practical remarks upon the rules which should guide the surgeon in determining to resort to this mode of treatment, and upon the steps of the operation itself, as well as upon the after-management of patients upon whom the operation has been performed, to the following effect:—

"First, as to the *selection of cases for operation*. The morbid conditions which may call for the operation of excision of the elbow-joint may be enumerated as follows: Grave wounds of the articulation; compound fractures implicating the joint; compound dislocations; arthritis which has resisted non-operative measures, or which has advanced to the stage of destructive disorganization—and particularly arthritis of the gelatinous variety; fibrous ankylosis when complicated by frequently recurring attacks of inflammation of the joint; and bony ankylosis, when the limb is in such a position as to render it useless to the patient. The operation is, indeed, recommended by some writers in cases of bony ankylosis in a good position; but for my own part I have never felt justified in resorting to it under these circumstances.

"It will thus be seen that excision of the elbow may be resorted to with much greater freedom

than excision of other large joints; for, on the one hand, the mortality after the operation is so moderate, that, when the disease or injury is limited to the joint-structures, excision should be almost invariably preferred to amputation; and, on the other hand, the result of a successful excision is so much better as regards the utility of the limb than the cure obtained by the occurrence of ankylosis (which is often the best that can be hoped for when expectant measures only are employed), that the operation may in many instances be resorted to with propriety, when, in the case of the knee, for instance, no interference would be thought of.

"The chief contra-indications to excision of the elbow have regard to the *age* of the patient and to his *constitutional condition*, particularly in respect to the existence or non-existence of visceral disease.

"To illustrate the influence exercised by the *age* of the patient upon the result of the operation, I have recast Hodge's table of 119 cases of excision of the elbow for disease of the joint, in such a way as to show the mortality at different periods of life:—

Age.	Recovered.	Died.	Amputated.	Not terminated.	Total.
Under 10..	3	1	2*	..	6
10 to 20..	27	3	2*	..	32
20 to 30..	28	3	6*	2	39
Over 30..	26	7	5†	..	38
Not stated	3	1	4
Aggregate	87	15	16	2	119

"From this table it is seen that while the mortality for all ages under thirty is but about 9 per cent. (77 cases, 7 deaths), the mortality for all ages over thirty is almost 24 per cent. (38 cases 9† deaths); and even between the ages of twenty and thirty, the increasing gravity of the operation is manifested by the large number of cases in which it was found necessary to resort to amputation as a means of saving life.

"The *constitutional condition* of the patient exercises a very important influence on the result of the operation. There is perhaps less immediate risk attending an excision of the elbow than an amputation of the arm, on account of the comparative freedom from hemorrhage in the case of the first-named operation; but the much longer period required for convalescence, after excision, not only exposes the patient necessarily during a longer time to the inroads of what are often, though improperly, called hospital diseases (erysipelas, pyæmia, etc.), but gives opportunity for the development of visceral diseases, especially tuberculous and amyloid degeneration, or for their aggravation if already in existence.

Hence, before determining to resort to excision of the elbow, particularly in the case of an adult, the surgeon should carefully inquire into

* Recovered after amputation.

† Two recovered; two died; result of one not mentioned.

‡ This includes the two cases which terminated fatally after amputation.

the patient's constitutional condition, and especially into the state of the lungs, liver, and kidneys; should there be reason to suspect serious disease of any of these organs, the operation of excision would be so far contra-indicated, and, if under these circumstances any interference should be required, preference should, as a rule, be given to amputation.

A few words must suffice for what I have to say as to the *steps of the operation* itself. Except in my first case, in which I adopted the H incision of Syme and Butcher, I have uniformly employed (as originally suggested by Park) a single longitudinal incision on the inner and posterior side of the joint. With a little practice this mode of operating is found quite as easy as any other, while it has the great advantage of leaving a linear wound which has no tendency to gape. I have no hesitation in recommending it in all cases, herein venturing to differ from Prof. Hamilton, of New York, who prefers the H incision when the operation is required for traumatic causes.

"The length of the incision may vary from two to five inches, according to the size of the arm. Its direction should, of course, correspond with the long axis of the limb, and it should pass on the inner side of the olecranon, and a little on the radial side of the ulnar nerve. In order to guard against loss of the power of extending the limb, Prof. Spence recommends that the triceps tendon should be divided by means of an incision in the form of an inverted A, while, with the same object, Mr. Mauder takes care to respect those fibres of the tendon which are inserted into the fascia of the forearm. Either of these plans may be adopted with good result. Prof. Sayre's plan, of leaving the portion of the olecranon to which the tendon is attached, would, I should fear, increase the risk of ankylosis.

"I have formerly advised that the olecranon process should be severed with strong cutting forceps, at an early stage of the operation, but further experience has convinced me that this is quite unnecessary, and in my more recent cases I have abandoned the procedure; it, however, undoubtedly renders the operation easier to one who is performing it for the first time.

"The points of most importance in the operation are to save the ulnar nerve from injury, and not to interfere with the tubercle of the radius, so as to preserve the attachment of the biceps muscle. In excisions for disease, the nerve need give no trouble, for it is so imbedded in inflammatory tissue that it can be readily drawn from its position in the groove between the olecranon and internal condyle, and held to the inner side, and indeed need not be seen during the whole operation; in traumatic cases more difficulty is, of course, experienced, though even here a little care suffices to avoid any untoward accident. Provided that the tubercle of the radius is preserved, the more bone (within certain limits) that is removed, the better will be the result of the operation; the risk of ankylosis is much greater than that of flail-like union (which I

have never seen in these cases), and hence the saw may be used freely, without any dread of interfering with the future utility of the limb.

"In the *after-treatment* of a case of elbow-joint excision, the most important point, in my judgment, is to guard against the occurrence of ankylosis; and this may best be done, as I have already indicated, by abandoning the splint at a very early period—as soon as the external wound has united, and the inflammatory swelling which always follows the operation has subsided. Some writers, indeed, go so far as to recommend that no splint at all should be employed, but that the limb should be, from the first, simply laid upon a pillow. This advice, I must confess, seems to me injudicious, particularly in the case of children: by putting the limb at rest upon a well-padded splint for a week or ten days, the risk of consecutive hemorrhage is greatly diminished, the inflammatory action which follows the operation is lessened, and the part is placed in the most favorable condition for rapid repair.

"I shall terminate this paper with a brief reference to the *statistics* of the operation. Heyfelder and Boeckel have tabulated in all 203* cases of total and 79 cases of partial excision of the elbow. The result in one of the cases of total excision is not stated, but of the remaining 202, 8 were saved by amputation, while only 24 terminated fatally, giving a death-rate for the operation as performed for all causes of less than 12 per cent. If excisions for chronic disease only are considered, the figures are 145 cases with 20 deaths and 7 consecutive amputations, a mortality of over 13 per cent. The 79 cases of partial excision gave 8 deaths and 3 amputations, a mortality of but little over 10 per cent. Hodge's statistics, which though less extended are probably more accurate, give a slightly different result; of 119 cases of excision for disease, 15 terminated fatally and 15 required subsequent amputation, death moreover following in 2 of the latter; these being included in the list of fatal cases, the death-rate is found to be over 14 per cent. It is to be observed, however, that these figures embrace both complete and partial excisions, as well as 16 cases in which it is not mentioned whether the whole joint was or was not removed. If the complete excisions alone are considered, the figures are 82 cases with 7 deaths and 7 amputations (one fatal), the mortality thus being but a little more than 10 per cent. On the other hand, 21 partial amputations gave 5 deaths and 3 subsequent amputations, a mortality, therefore, of nearly 24 per cent. Ollier has laid great stress upon the importance of preserving the periosteum in excisions of the elbow, and has reported 35 cases of the subperiosteal operation, with 30 recoveries and 5 deaths, a mortality of over 14 per cent.

"When performed for traumatic causes, the operation, in civil life, would appear to be

ordinarily attended with very little risk; 21 cases referred to by Dr. Hodge having given but one death, and that 'from causes in no way attributable to the excision.'

BALTIMORE MEDICAL ASSOCIATION.

REPORTED BY J. W. P. BATES, M.D.

Septicæmia.

Dr. Tiffany. The terms *septicæmia*, *pyæmia*, and *ichorrhæmia*, indicate a class of diseases of which we do not know the exact cause, but we do know the clinical history. *Pyæmia* occurs suddenly; there is a rapid pulse, clayey cast of countenance, variable temperature, perspiration, no local symptoms, rapid failure of the vital forces, and death by asthenia. We recognize two conditions, systemic and local, the latter almost always suppuration. There may be a suppurating surface, or a depot of pus, but it follows in some cases where no abrasion can be detected. A man between sixty and seventy years of age had retention of urine from enlarged prostate. The urine was drawn off without trouble. On the next day had a chill, pulse 160 to 170, and the other symptoms of *pyæmia*, and died on the third day. No post-mortem examination was allowed; no abrasions could be seen, and I think there was no lesion of the mucous membrane. There are cases on record where no abrasions could be detected after the most careful post-mortem-examination. It generally results from a sore, which takes on an unhealthy character before *pyæmia* makes its appearance. It is called *pus* in the blood, but the microscope reveals nothing. With high powers certain fine particles endowed with motion may be seen; they are not peculiar to *pyæmia*, but are met with in *dyspepsia* and other wasting diseases. After death we may find many bacteria. The formation of abscesses first directed the attention of physicians to discover through what channels the pus flowed into the blood. The blood is composed of corpuscles and liquor sanguinis, and if the white corpuscle and the pus corpuscle are identical, as claimed by some, pus is normally in the blood all the time.

In animals affected with *pyæmia* there is always marked irritation of the gastro-intestinal mucous membrane, but vomiting is rarely met with in man.

We cannot say that the formation of abscesses is always produced by embolism; in some it is not possible, while in others it is perfectly sure. It is usually supposed that the abscess will form at the first set of capillaries from the point of irritation. Thus, wounds of the rectum produce abscess in the liver. The hemorrhoidal veins carry the pus which is arrested at the first set of capillaries. This is not, however, a universal rule, and it is hard to locate the foci. Wounds of the head and inflammation of the diploe are followed by hepatic abscess; after scarlatina, the joints are more par-

* Incorrectly numbered in Boeckel's translation of Heyfelder's Treatise as 208.

ticularly affected; and after typhoid fever, the salivary glands.

In some cases we can find no point of primary suppuration. I am inclined to think that we may discover that pyæmia is two or three diseases, instead of one. Bright's disease was, for a long time, considered a single disease, but by close investigation it has been divided into several.

Erysipelas and pyæmia rarely occur together. I think I have seen three cases recover after the use of twenty-grain doses of quinine three times a day. How it acted I cannot say, and the diagnosis is in doubt, but all the symptoms were present. The first occurred after external perineal urethrotomy. There was vigor, quick pulse, clayey countenance, variable temperature, sweating, etc. Second, after lithotomy, rigor on third day, irregular chills, sweating and variable temperature. Third, necrosed tibia—same train of symptoms—temperature 106 $^{\circ}$, the highest I have ever seen and the patient recover. The formation of abscesses is a secondary effect. If the amount of the poison taken into the system be large, the blood is rendered non-viable and the patient dies before the abscesses have time to form. The shortest time I have ever seen a case terminate fatally in, was thirty-six hours. We have no specifics; open the abscess and support the system by brandy, beef-tea, etc.

In regard to the use of antiseptics in surgery, my experience has not been favorable. I treated one case after Lister's method, but it turned out shockingly. I depend upon cleanliness and drainage. Patients do get well occasionally after pyæmia, which is due more to the inherent strength than to medication.

Softening of the Brain.

Dr. Noel related the following case: A man, 77 years old, who has been a free liver all his life, was taken with symptoms indicating trouble in the brain. There was atheromatous degeneration of the valves of the heart, and I think, change in the arteries of the brain. Directly after Christmas he evidenced cerebral trouble, which, taking into consideration the history of the case, I thought was softening. There was loss of memory and a low, muttering, wandering delirium. After two or three days, Dr. Donaldson was called in consultation. The delirium lasted for fifteen or twenty days. He had one symptom which I had never seen in a case that did not prove fatal, viz: interrupted respiration. At one time I counted 48, at another 30, etc., between the respirations. I have seen this symptom in tubercular meningitis, and in wounds of brain and medulla, and also in two fatal cases of cerebral softening during the past winter. In this gentleman the trouble gradually wore off; his memory is good, and he is now convalescent. Since his recovery I have come to the conclusion that there was either circumscribed softening and oedema, which produced the prominent symptoms, or else I was mistaken in my diagnosis. I ap-

plied cold to the head, gave potass. iod. and potass. bromide; and, when he began to fail, quinine in large doses every three hours. Chloral was used at night. This does not differ much from the treatment used in the other two cases, except that in one of them I used leeches twice.

Acute Congestion of Lungs.

Dr. Tiffany. A strong, healthy negro, set. 21, came into the hospital with a tumor in the left groin, freely movable, about half as large as the hand, and seated just below Poupart's ligament. I proposed to remove it, and gave him ether, but after taking two or three whiffs, his heart lessened its frequency and it was discontinued. The tumor was removed without difficulty, and no shock or depression resulted. He slept well until 2 o'clock, when he was heard talking, and upon examination, was found with a chill. At 7 A. M., the chill had passed off; his respiration was 40; temperature 105°. At 12 M. pulse 160; respiration 60; temperature 106°, and there was dullness on both sides of the chest, half way up. At 3 P. M., the dullness had much increased, and no vesicular murmur could be detected, and at 4 P. M. the respiration was 100. He died shortly after, fourteen hours from the commencement of the attack.

Post-mortem. Heart healthy; no embolism; lungs engorged with blood, looked like a piece of liver; no breathing surface whatever. The lungs were undoubtedly sound before the operation. I suppose it should be called a case of acute congestion of the lungs. In looking over the records of the hospital, I found an analogous case. A sailor, having a slight cough, was attacked in the same manner as the case above related, and died in nine hours after. Upon *post mortem*, the lungs were in exactly the same condition as those of my case.

Dr. Noel. Did the ether irritate the mucous membrane so as to produce an intense congestion, which, on account of the speedy death, had not time to pass into the second stage of pneumonia? During the war, a soldier from Virginia, was stationed in Georgia, and in March, as the weather was much warmer than he had been accustomed to at that time of year, took a bath in the river. He came out thoroughly chilled, and died in eight hours. Upon *post mortem* there was intense congestion of both lungs.

Dr. Tiffany. I hardly think the ether had anything to do with the trouble.

Dr. Monmonier. I think Dr. Noel's case explains Dr. Tiffany's exactly. The ether produced relaxation. He went out into the cold halls, took cold, and congestion was the result, just as after the bath.

Purpura Hemorrhagica.

Dr. Noel. A patient that had been suffering first with intermittent and afterwards with remittent fever, was slowly convalescing, when

small marks like flea bites appeared all over the body. On the second day these had spread and deepened, and had a raspberry appearance. There followed, afterwards swelling of the head, pain like that of rheumatism in the limbs, swelling of the arm, which looked as though it had been badly bruised, bleeding from the gums, etc. The swelling and pain subsided, but there was profuse salivation, although no mercury had been used. After a thorough ex

amination, the physicians in attendance decided that the trouble was degeneration of the liver and spleen, as the result of the prolonged action of malaria. The patient gradually sank, and died from asthenia and apnea, and upon examination after death, the diagnosis was found to be entirely correct. The spleen was dark slate color, engorged with blood, and contained an immense number of disintegrated corpuscles. The liver was black.

EDITORIAL DEPARTMENT.

PERISCOPE.

Strychnia Eating as an Antidote to Alcoholism.

Dr. H. C. Morey, of Gilroy, Cal., sends the following account of a strychnia eater to the *Pacific Medical Journal* :—

The individual in question is a man about fifty-two years of age, about five feet eight inches in height, and weighs about one hundred and fifty-eight pounds; dark complexion, very plain in appearance, very eccentric and peculiar in his habits, and always keeps his own counsel; has a good intellect, but a limited education.

I first became acquainted with this man in the fall of 1861, and soon learned of his habit of eating strychnia, after a long and continued debauch, and in a condition bordering on delirium tremens. The first time my attention was particularly called to it, he wished me to give him a bottle of strychnia, which I did at night, about bedtime. He took the bottle, pouring the strychnia into his hand, and threw it into his mouth as carelessly as though it were salt; and, in the course of half an hour, not feeling the effects from it that he wished, he repeated it, and continued to do so until he became perfectly sober. The quantity required would correspond to the length of time he had been drinking, and the quantity of whisky he had drunk. I was struck with the wonderful effect it had to so completely sober him, and leave his system so entirely free of any nervous disturbance, and without the reddened and bloated appearance of the face, the dull, heavy eyes, and irritable stomach of the drunkard. After a two weeks' drunk, with all the appearances of approaching delirium tremens, he got up in the morning with his mind clear, his eyes bright, his skin clear and fair, and with all the appearances of a man in perfect health and vigor, and ate as hearty a breakfast as usual, and went to his work as though he had never taken a drop of whisky in his life. My curiosity being excited at what seemed so unaccountable an occurrence, I began questioning him as to when he commenced its use, and what induced him to take it, but found him very

reticent, and have not, to this day, ascertained the causes that first led him to its use. All he will tell is that he commenced its use in 1856. From 1861 to 1867, I saw him very frequently, and almost as often have seen him take the strychnia, until it ceased to be a curiosity, except to study its physiological action. In every instance when he took it, every appearance of dissipation would disappear in a very short time. Whether *strychnia* is an antidote to alcoholic poison, and *vice versa*, was a study for which I could find no authority to guide my conclusions.

From 1867, I did not see him until the month of November, 1874, when he came to this place and called on me for strychnia, as of old. I told my clerk to give him all he wanted. He gave him a bottle, from which he took about twenty grains. In an hour he was all right, and sober as ever.

Digitalis in Bronchitis.

Dr. James Braithwaite writes to the *British Medical Journal* :—

Given a patient past the meridian of life, either very stout, or emaciated from previous bad health, and let him, or more commonly her, have a neglected bronchitis, and we have the following class of symptoms produced: A perspiring skin, a poor and quick pulse, urgent dyspnoea, bluish tinge of lips and skin, and respiration accompanied by loud wheezing sounds. The most successful plan of treating these cases, so common during the present severe winter, is the free administration of digitalis, which may be advantageously combined with the compound spirit of ammonia. The digitalis may be given in doses of ten minimis of the tincture every two hours. In these cases, it is the heart which is at fault, the right ventricle being gorged with blood, which it is unable to propel through the lungs. The best test of the truth of this theory is its success, for the pulse will be found to become full and slow, and the breathing relieved, directly the digitalis has had time to act on the heart. Its action is sometimes assisted by the judicious

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administration of a little alcohol. I prefer common gin. If, however, it be found that these cases of commonly called bronchitis are really dependent, for their non-recovery, at least, upon weak hearts, care must be taken as to the administration of stimulants, for they accelerate the action of the heart, and in the end weaken it. In fact, digitalis slackens the speed, and stimulants increase it, so they to some extent contradict each other. I have had some cases lately in which twenty minimis of tincture of digitalis were given every two hours for a whole day, and then decreased to ten minimis every four or six hours. This medicine will be found to be chiefly valuable when the pulse is weak and rapid. In one old lady about eighty years of age, the effect was remarkable, and in another, seen to-day, the pulse has fallen to 76, with corresponding relief to the other symptoms. In another case, in which the pulse was 120 and very weak, it acted magically, but I am sorry I made no note of the exact rate to which the pulse fell. Good support of all kinds may at the same time be given. I like stimulants less and less in this form of disease; if you want a horse to go one mile rapidly and well, the spurs may be used, but for a long journey a steady pace is better. Some patients are more susceptible of digitalis than others, therefore the effects must be watched, and the dose increased or diminished, as necessary.

Treatment of Ununited Fractures.

Dr. Nicoladoni, quoted in the London *Medical Record*, gives the following modification of what is known as "Dumreicher's Method":—

The injured leg, in which there is a tendency manifested to the formation of a false joint, is enveloped from the toes to a part a little below the fracture by a strong flannel bandage. Four wedge-shaped pads are applied, two above and two below the fracture, in such a manner that the broad ends of the upper and lower pairs are opposed to each other, and that between them a free surface of skin is left which corresponds to the seat of fracture. These pads are kept in position by strips of adhesive plaster, and covered by a thin wooden splint, over which a bandage is firmly applied. The whole limb is then kept at rest on an ordinary splint. By the application of the bandage below the fracture, the peripheral portion of the limb is protected against the injurious results of pressure made by the pads above the ankle. The pressure of the lower pads and of the flannel bandage induces an active arterial hyperemia of the parts about the false joint, which hyperemia is more or less restricted to these parts, as the two pads are so applied as to retard the backward flow of venous blood, though not interfering very much with the arterial supply. After an application of this apparatus for twenty-four hours, the skin becomes red and hot, and the fractured portion of bone can no longer be felt, on account of

the swelling of all the superjacent soft parts. This swelling is firm, and differs altogether from ordinary *œdema*. On the second and third days, the parts between the wedge-shaped pads become more swollen and firmer; but this swelling will speedily disappear on the removal of the pads, and will not persist and do any good until after the apparatus has been retained for five or six days. In favorable cases, after an application kept up, with occasional short intervals, for three or four weeks, the fragments become much less movable, and cannot be examined and moved without much pain. The limb can now be placed in a firm apparatus of plaster of Paris or water-glass, and in a few weeks the fracture will become firmly consolidated. In the first case reported by Dr. Nicoladoni, the pads were applied during eight weeks, with occasional intervals of rest, lasting for two days. A gypsum bandage was then applied, and at the end of the tenth week the fragments of tibia were found to be firmly consolidated. In the second case the pads and bandages were applied during a period of two months: six weeks after their removal and the application of a firm bandage, there was perfect union.

Poisonous Effects of Poke-root.

Mr. Charles H. Cressler, of Chambersburg, Pa., writes to the *American Journal of Pharmacy*:—

On the evening of January 28th a package of poke-root, gathered early in November last, properly sliced and dried, and weighing seventy-eight troy ounces, was opened, and seventy-two ounces set aside to be prepared for percolation in the morning, six ounces coarsely ground and put in store drawer. A clerk and myself, who handled the drug, experienced some slight dryness of the throat during the night. In our next morning salutations we recognized that each had, as we supposed, a cold, our voices being quite husky. At about half-past eight o'clock the porter proceeded to prepare the root for percolation, and in about two hours it was, by means of an Enterprise drug mill and a tin cased sieve, prepared, moistened and packed in a percolator. By this time we experienced something like an endemic coryza, which we attributed to the dust of the poke-root. The floor was sprinkled and all dust carefully removed with damp towels. Three clerks, porter and myself seemed affected to a greater or less extent, and coughed violently. There was a decided indisposition at one P. M., on the part of all concerned, to eat dinner, and there was continued coughing, with soreness of chest, and eyes were much inflamed. At seven P. M. four of the parties were unable to eat supper, and one of them went to bed very sick, with eyes much swollen, pain throughout the body, and chill, followed by high fever. At ten P. M. free vomiting was induced, somewhat to the relief of the patient, but entire recovery did not ensue for forty-eight hours.

No. 2 was very ill at nine P. M., with both vomiting and purging, eyes much irritated, and

patient very restless during night and until noon of following day. During convalescence of forty-eight hours, purging continued to a considerable extent, after which the patient recovered.

A child of the writer, six years of age, who happened in the store for not over five minutes, at the time the drug was being prepared, was seized with a cough in the latter part of the day, which lasted into the night, and much resembled croup. This we attributed, as in the other cases, to the effects of the drug. A marked feature in all the cases was a very decided soreness of all the motor muscles of the body.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The valedictory address to the medical graduates of the University of Louisville, by Dr. David W. Zandell, is in advocacy of cremation. It gives a well presented summary of the recent endeavor to revive that ancient rite.

—The fourth annual report of the Dispensary of skin diseases, of Philadelphia (1874), gives a total of 436 cases under treatment. Nearly half of these was eczema in some of its varieties. Psoriasis was also common.

—The addresses delivered at the Fifty-third Annual Commencement of the National Medical College, Washington, form a pamphlet of twenty-seven pages. They are by Mr. J. C. Welling, and Drs. W. B. Drinkard and Gabriel F. Johnson.

—The address of Dr. D. Hayes Agnew, the retiring President of the Philadelphia County Medical Society, contains the description of an instructive series of experiments on the repair and development of bone tissues. His conclusions, in detail, will appear soon in the *Periscope* of this journal.

—The valedictory address at the last Commencement of the Syracuse University (Feb. 19, 1875) was by Dr. Henry D. Didama, on "the model physician and model patient." It is conceived in the liberal spirit of sound ethics.

BOOK NOTICES.

Proposto interno la cura della Lissa. Roma, 1875.
pp. 32.

Prof. Cadet, in this pamphlet, suggests the use of his favorite remedy, the ethiops mineral, in

the treatment of hydrophobia. He would not omit the usual surgical precautions of ligation, dry-cupping or suction, washing and cauterization, but would add to them the internal administration of the mercuric sulphuret. As no means hitherto devised has ever cured a case, his suggestion deserves a trial.

Sixth Annual Report of the State Board of Health, of Massachusetts. January, 1875. Boston. pp. 379.

We always welcome the appearance of this annual volume, confident of finding in it new and rich material for sanitary science. The present issue does not disappoint us. It contains several very thorough studies on topics of general interest. The tenth subject treated, "cremation and burial, an examination of their relative advantages," is the most lucid discussion of the question we have anywhere seen, and contains the most complete bibliography of the subject. The conclusion is, that at present there is no sufficient cause for changing the present system of burial.

Other topics treated of, are "on inebriate asylums or hospitals, on the value of health to the State, on the transportation of live stock, on the meat supply and public health, on the composition of the air, of the ground atmosphere, on the ventilation of railroad cars, and on the health of towns." It will be seen, from this catalogue, how vitally the topics discussed concern the interests of the public in general, as well as the natives of Massachusetts, and they are, without exception, handled in an able and liberal manner. The conclusions on some of these subjects we shall have occasion to refer to hereafter, in this journal.

Half-hour Recreations in Popular Science; The Sun and the Earth. By Prof. Balfour Stewart. Force electrically exhibited, by J. W. Phelps. Boston, Estes & Lauriat. Price 25 cents.

Half-hour Recreations in Natural History; Insects of the Field. By A. S. Packard, Jr. Estes & Lauriat. Price 25 cents. For sale by Claxton, Remsen & Haffelfinger, Philadelphia. These instructive essays will be read with interest. They explain, in well-chosen and popular language, the scientific studies of which they treat. Among the other insects discussed by Mr. Packard, is the Colorado potato bug. He justly deplores the supineness of our government, which, warned ten years ago, did nothing to stay its eastward march. The only substance he recommends for it is Paris green.

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 PHILADELPHIA, PA.

THE NATURE OF FEVER.

One of the most prominent of all morbid symptoms or conditions, is that of Fever, and the amount of attention it has received has been in proportion to its frequency and importance. Mainly through the careful observations of Dr. PARKES, a generalization of Fever has been reached, such as to conciliate all the appearances it presents. This generalization is expressed by the simple fact—"Elevation of Temperature." The conditions and proximate cause of this elevation have not been so clearly made out.

Two recent attempts in this direction deserve mention. One is embraced in the Fourth Toner lecture, delivered by Dr. H. C. Wood; the other in a publication by Dr. MURRI, of Fermo, in Central Italy.

Dr. Wood, in commencing his lecture, sets out to show that "the essential part of fever is elevation of temperature." Here, as we have

above stated, he is merely following in the path of Dr. PARKES, and arrives at the conclusion already so clearly stated by the latter. The next question is, "in what way is the rise of temperature produced?"

The two theories which are current attribute this elevation, the one to the circulatory, the other to the nervous system. The latter is that wholly adopted by the lecturer. He says "fever is entirely independent of the circulation and the respiration;" and holds that there is a nerve centre in the pons or above it, whose function it is to inhibit the chemical movements of the body, and that in consequence of the paralysis of this inhibitory action, the increased chemical movements throughout the system lead to the elevation of temperature and other characteristic symptoms of the febrile state.

These opinions differ considerably from those supported by the studies of MURRI (with whose work we are made acquainted chiefly by the London *Medical Times and Gazette*). He shows that the experiments on dogs adduced in support of the neurotic theory of fever have been inaccurately made and interpreted. Less heat, he believes, is produced after division of the cord than before. This his experiments show, as previous and familiar ones had done.

The American observer claims that after division of the medulla, high up, there is always a rise in the temperature; the Italian physiologist has been unable to convince himself that this observation is correct. Hence the latter insists that the results of his experiments completely negative the idea of fever being due to a neuro-paralytic lesion. In fever more heat is given off than in health, whereas, after section of the spinal cord less heat is given off; and since we know of no other experimental lesion of the nervous system which alone and unaided increases the production of heat in the tissues, the neuro-paralytic theory must be abandoned. Murri shows, too, that *septic* fever is not dependent, as has been supposed, on an interference with any centre in the brain which restrains

the production of heat; for when the brain's influence is completely cut off by the division of the cord, putrid pus injected under the skin makes the temperature rise, just as in a healthy animal; and the whole length of the cord below the point of section may be destroyed without preventing the development of septic fever.

He finally concludes by expressing his conviction that the only theory which will satisfactorily explain fever is the bio-chemical one, which makes fever in the main depend on an increased production of warmth. He points out that all our clinical experience of the incubation of fevers, and of the predisposition to and immunity and spontaneous recovery from them, is completely unintelligible on the neuro-paralytic view, but explicable on the bio-chemical, and that only the latter theory renders an account of the qualitative tissue-changes which accompany fever.

NOTES AND COMMENTS.

Therapeutical Notes.

SULPHATE OF CADMIUM IN GONORRHEA.

Dr. Gazeau has employed, with much success, in the acute stage of urethral blennorrhœas, a solution of the sulphate of cadmium, one grain to two, three or four ounces of water, used every two hours.

FAVUS.

Dr. W. G. Smith, of Dublin, reports, in the *Irish Hospital Gazette*, some cases of favus. The treatment which easily effected a radical cure was the use of a lotion of perchloride of mercury (gr. ss to $\frac{3}{4}$), subsequent to the removal of the crusts by poulticing, and afterwards carbolic ointment. The resemblance of the circular, red, scaly patches, observed in one case, adjoining the pathognomonic yellow favus cups on one of the patches, reminded one of ordinary ringworm.

CHLORAL IN TETANUS.

In the treatment of traumatic tetanus by chloral, Dr. Gontier reaches the following conclusions. Chloral may render great service in the treatment of chronic or subacute tetanus, and is especially preferable to other drugs. It is completely ineffectual in acute tetanus, and

only has a slight palliative action. It may be advantageously associated with tonics, diffusible stimulants, and diaphoretics. Intravenous injections of chloral are extremely dangerous, and should, in the present state of science, be reserved for exceptional cases only.

TINEA CAPITIS.

Dr. McBride, of Cincinnati, says:—

The best treatment is to apply a blister all over the scalp. "It is not necessary to shave the scalp and apply a plaster. Cover the scalp with cantharidized oil, or tincture of cantharides, and then cover with oiled silk, a greased cloth, or green leaves, and you will have blister enough."

THE ADMINISTRATION OF PHOSPHATES.

It is maintained, by Samson, Dujardin-Beaumetz, and other leading French physicians, that the only way of administering phosphates is to employ those which Nature has already assimilated, bran-bread, and beans of different kinds. Whenever it has been wished to augment the dose of phosphate by adding soluble or insoluble phosphates to the food of animals, these phosphates have only passed through the economy without effecting any lodgment there. However, beneficial results seem to have been obtained from soluble phosphates in certain affections; and these successes M. Dujardin-Beaumetz explains by the precipitation of insoluble phosphates, as M. Mialhe demonstrated a long time since, and M. Cauler at a later period, and by the favorable action of hydrochloric and lactic acids on the digestion.

TAR INTERNALLY.

Mr. Balmanno Squire reports tar internally as useless in psoriasis and similar cutaneous diseases. But in some diseases of the digestive organs it is very efficacious. For its preparation Mr. Martindale gives the following formula:—

R. Tar,	gr.ij
Lycopodium,	gr.j.
Make one pill.	M.

These proportions form a mass which can be moulded into pills readily, but the mass improves and becomes firmer if kept a few days before rolling out. Two parts of liquorice powder, added to three parts of tar, make a tolerably good mass. Flour, as recommended by Dr. Garrod, does not answer well. But the most elegant and palatable form of administering tar is that of the gelatine globules (containing

on an average about two and a half grains in each), prepared by M. Thevenol, of Dijon. They have no odor, are perfectly soluble, and can readily be taken by the most fastidious.

On the use of calcined magnesia as an excipient for forming tar into pills, he adds: "One part of it added to three parts of tar makes a soft mass, which soon hardens, and can be moulded into pills. Pharmaceutically, they are all that can be desired, but the creasote and resinous acids contained in tar form compounds with magnesia, which are so insoluble that they are passed by the patient undissolved. They can even be boiled in water without losing much of their globular shape. The same remarks apply to creasote itself."

ACID DYSPEPSIA.

In acid dyspepsia, Dr. C. R. Fleury, in the *British Medical Journal*, suggests to an inquirer to give his patient small doses of dilute sulphuric acid, say three drops four times a day, in a half wineglassful of water. He adds:—"I attach importance to its being given thus plainly and without any admixture of other drugs. I have treated with unfailing success several hundreds of such cases, whether arising from dyspepsia pure and simple, or complicated with cardiac disease."

TREATMENT OF PEMPHIGUS.

Dr. Hillairet, founding his plan of treatment upon the analogy which exists between pemphigus and the second degree of burns, employs, in cases of this affection, which is generally so rebellious to treatment, the remedies found useful in burns—viz., the covering of the parts with wadding soaked in oleo-calcareous liniment. The pruritus soon abates, and the bulbous eruption ceases at the end of a variable period.

Ancient Sanitary and Medical Knowledge.

Some interesting facts were collected in a recent address by Dr. Routh, before the Medical Society, of London. Taking ancient Rome as an example, he demonstrated that their sanitary arrangements in the way of baths of every kind was far superior to that of London; the sewers were larger, the water supply better and continuous. He referred to the subject of fibrinous concretions of the heart, discovered by Gould in 1684, described by him, subsequently by Chisholm in 1790, and forgotten till 1851, when Dr. Richardson disinterred

these works and placed the disease beyond doubt, long before Virchow or other continental writers had written about embolism and thrombosis. Dr. Routh then mentioned transfusion, originally practiced on Pope Innocent VIII, by a Jew, in 1492, forgotten till 1665, when experimented on in England by the Royal Society, and falling again into disuse till revived in England by Blundell, and now fully recognized as a proper operation. He next spoke of the controversy on the use of the speculum vaginæ, which took place in London twenty-five years ago, showing it was used in the time of Domitian, and had been found in the ruins of Pompeii, and yet had been forgotten for centuries. He dwelt upon the question of cremation and burying in wicker baskets, both olden customs, yet now remembered and likely to be employed again.

Consanguineous Marriages.

This was the subject of a recent paper by Mr. Darwin, son of the eminent naturalist. He stated that the most thorough investigation ever made was contained in some papers *On Blood Relationship in Marriage*, published by Dr. Arthur Mitchell, a Deputy Commissioner for Lunacy in Scotland. This gentleman's inquiries were confined chiefly to Scotland, in which country the proportion of first-cousin marriages is larger than in any other portion of the United Kingdom; and the conclusion he arrived at was that, under favorable conditions of life, the apparent ill-effects were frequently almost *nil*, while if the children were ill-fed, badly housed and clothed, the evil might become very marked. This, said the lecturer, was in striking accordance with some unpublished experiments of his father's, "On the In-and-in Breeding of Plants," in which he found that in-bred plants, when allowed space enough and good soil, would frequently show little or no deterioration; but when placed in competition with another plant, would frequently become stunted or altogether perish.

The Teeth as Sexual Organs.

Dr. A. H. Thompson, in the *Dental Cosmos*, argues that the teeth of man will ultimately be suppressed. Already, he claims, they have lost an important use. He says, "As prehensory organs, the value of the teeth is great to many of the lower forms, for battle, as 'secondary sexual organs,' and the prehension of food,

but in the higher animals the teeth have been superseded by the evolution of prehensile limbs, and the consequent suppression of this function in the teeth. In man we find the prehensory teeth suppressed to mere rudiments of former formidable and useful weapons, being reduced to the merest purpose for the prehension of food, and are utterly aborted as 'secondary sexual organs.' This is a fact that cannot be mistaken, and is full of significance."

CORRESPONDENCE.

Too Much Water or too Little Milk?

ED. MED. AND SURG. REPORTER:—

In the REPORTER for Sept. 12th, 1874, No. 915, I gave a brief sketch of two cases, infants, whom I suspected to have been too much bathed. Acting upon this suspicion, I gave directions to modify in form, and diminish in number, these daily ablutions, to, at most, two per week, and these were to be nearly dry, or sponge baths, rather than general lavements. I also instructed the mothers to keep flannel garments upon their children, in order to maintain as nearly as possible a uniform temperature for the chest and abdomen of the little fellows.

My instructions were obeyed, I believe, as far as practicable. There was no further decline in these cases. In due time a change for the better was quite perceptible in both cases. A month more and they could laugh again, and soon grew fat. No other advice was taken in these cases. No other medication employed. This happy result seems to me all that could be desired. Recently I examined both these children, and found them firm to the touch, plump and healthy. The possibility of the existence of some other difficulty, not comprehended by me, led me to express a wish to be informed what that obscure difficulty might be, if any one would be so kind as to point it out.

During the winter I received a private communication from Dr. Hiram Corson, calling my attention to a point of no secondary consideration. He suggested that the children may not have been properly fed. Upon this point I made strict inquiry. Neither the quality nor the quantity of the food was interfered with in the above case. It is only fair to state, however, that one of the cases continued, twice daily, from ten to twelve drops of whisky, and the other as much brandy for a longer period.

But are we not taught that neither whisky nor brandy is food? It appears, then, that, at least, these cases are not starved. At my request, the Dr. very kindly forwarded to me a copy of his pamphlet, entitled "*Food for Infants*," from which I glean some important facts. I agree with the Doctor when he says that many children are starved, through the ignorance of the nurse or the mother. They are under-done, over-done, and soothed or Winslowed to death. Some of them pine; some are cross and very restless; they fall away in flesh; their arms and legs have a doughy feel; the breath is short and the voice begins to fail; the head is too heavy for the neck. The mother thinks her child is sick; the doctor is called in; the critical point comes along with the doctor. The child is examined. It has no fever; it has no diarrhoea; the head is cool enough; the eyes are slightly sunken; to the touch the flesh is soft and flabby; no resiliency about it; it doubles up like a sack; it has an old, sad expression of feature not common to healthy infants; it does not laugh; it used to walk but cannot now; it used to laugh and crow, but it does not now. "For a month or more it has not seemed like the same baby. I am sure there is something wrong, but I do not know what it is. I bathe it every morning. I always did that, or I had the nurse to do it, from the time it was a week old."

Here is the point for the doctor to hang his suspicions on. Now he may work up his case. Some children endure the daily bath for years, with benefit, or at least without injury. They may not all be plunged into the daily bath for twelve months with impunity. If a handful of common salt were invariably added to the water, then there would be less objection. At least there would be less water absorbed by the skin of the infant, to ooze out in the course of half an hour, and by evaporation lower the temperature of that child considerably.

This is certainly a case of too much water. And if the child is fed upon cow's milk, half water at that, it is almost a case of drowning. I have known a number of children that were raised or fed on cow's milk, and but little difficulty attended the raising of them. When it may be done, I select a young cow, of good condition, and one that yields good, rich milk. To a given quantity of cold milk I add a sixth part of hot water and a little white sugar: of this give the child what it will take. I prefer that the milk be always cold and the water boiling hot, or at least 200° Fahr. I prefer this because we cannot always have it of the same temperature as when drawn fresh from the cow. A child one month old will consume a quantity of milk in twenty-four hours that may astonish many a young mother, and even some of the older ones. From a pint to a quart, and even a larger quantity per day will be taken before the child is able to walk. Many children are fed too little, and perhaps, too, bathed too much.

A. D. BINKERD, M.D.

Pennsylvania.

NEWS AND MISCELLANY.

American Medical Association.

By request of many members, I will shortly issue a pamphlet edition of the minutes of the Louisville Session. Those who desire copies should remit 50 cents at once, as a limited edition will be printed. Wm. B. ATKINSON, 1400 Pine Street, Philadelphia.

The Erie County (Pa.) Medical Association.

This body held its quarterly meeting on the 4th of April, at the office of the President, Dr. W. M. Wallace. Dr. A. S. Lovett read a paper on a peculiar case of Spinal Irritation. Dr. J. L. Stewart presented a paper describing the successful treatment of a case of malarial neuralgia by quinine. The papers were discussed at some length. The next meeting is to be held in July.

The International Medical Congress.

This body meets the present year in Brussels, September 19th. The following are the questions to be discussed:—

1. On the Prophylaxis of Cholera.
2. On Alcohol in Medicine.
3. The Inoculability of Tuberculosis.
4. Anesthesia in Surgery.
5. The Dressing of Wounds after Operations.
6. On Lying-in Institutions.
7. The Vaso-motor Nervous System.
8. The Value of Experiments on Artificial Circulation.
9. The Prophylaxis of Phosphorus Poisoning in the Arts.
10. The Organization of Sanitary Bodies.
11. The Brewing of Beer.
12. The Military Relations of Optical Defects.
13. The Means of Measuring the Acuteness of Hearing.
14. The Military Relations of Aural Defects.
15. The Universal Pharmacopeia.
16. Is it Desirable to Extend the Use of Chemical Radicals in Therapeutics?

Suit for Malpractice.

A young man, named Doyle, lately brought suit, in New York, against the Eye and Ear Infirmary and Dr. R. Derby, to recover \$100,000 for the loss of his sight.

The complainant charged that Dr. Derby had applied a brush to his eyes that contained pus from the eyes of a patient suffering with malignant ophthalmia, thereby causing his blindness. He testified that he saw Dr. Derby use the same brush on a number of patients.

The defense testified that there was no such case of ophthalmia as was mentioned in Doyle's testimony in the infirmary, from which purulent matter of the kind described could be obtained; and if there had been, and had that matter been on the brush with which Doyle was

treated, the solution of nitrate of silver which was applied to Doyle's eyes would have killed the virulent properties of the pus.

It had been shown that a disease like Doyle's might have its origin in a blow, in a cold, or in the introduction of purulent matter.

The Judge reviewed the whole testimony on both sides thoroughly, and then said that the question for the jury to decide was, whether Dr. Derby, in his treatment of Doyle, on the 12th of February, used a brush that he knew had been used on another patient, and that he knew had been inoculated with purulent matter, without cleansing it. If they thought he did, the verdict would be for the plaintiff. If there was any doubt, then Dr. Derby was entitled to a verdict.

The jury were out only ten minutes. Then they returned with a verdict for the defense.

Health of Denver.

Dr. F. G. Bancroft, city physician of Denver, Colorado, claims, in his annual report, the exceptionally favorable death-rate of 13 in 1000 for that city. Of consumption he says:—

I must say of the large number of consumptives who came to Colorado in all of the different varieties and stages of the disease, with the hope of an immediate and permanent cure, that the greater portion eventually die; yet I am fully of the opinion that the climate of Colorado gives to the invalid in the early stages better chances of either a complete restoration to health or a prolonged and happy life, than any other part of the Union. Even in hopeless cases, our clear, dry, exhilarating air gives buoyancy to the spirits, that carries the patient to his final hour with less physical and mental suffering than could occur in damp and gloomy climates.

The Centennial.

The London *Chemist and Druggist* reminds British drug merchants of the importance of this international fair, in the following words:—

"It is to be hoped that English manufacturers will not neglect the opportunity which the Philadelphia Exhibition will offer next year, of extending relations with the United States. We hear that German chemical manufacturers are likely to be well represented, and it cannot be doubted that the influence of a grand display on that occasion will be very considerable with Americans, who are already too much disposed to make their purchases elsewhere."

Michigan Liberality.

In a freak of liberality the late Legislature of Michigan appropriated the funds necessary to add two chairs of Homoeopathy and two of Dentistry to the "Medical Faculty," and also three chairs of Engineering to the Faculty of Science, in the University of Ann Arbor; the act to be carried into effect the next college year.

The Duration of Life.

The following facts on the duration of life appear in the *Deutsche Versicherungs Zeitung* :—

"In ancient Rome, during the period between the years 200 and 300 A. D., the average duration of life among the upper classes was 30 years. In the present century, among the same classes of people, it amounts to 50 years. In the sixteenth century the mean duration of life in Geneva was 21.21 years; between 1814 and 1833 it was 40.68 years; and at the present time as many people live to 70 years of age as 300 years ago lived to the age of 43."

Personal.

—Dr. George H. Bixby, of Boston, Mass., respectfully solicits from those members of the profession who have performed ovariotomy, their experience in regard to pregnancy occurring after that operation.

—The death is announced, of the famous traveler and artist, Jean Frederic De Waldeck, at the extraordinary age of 110 years.

—Dr. A. C. Herbst, aged 35, died suddenly, in Baltimore, May 13th. A bottle containing poison having been found in one of his pockets, it was supposed that he committed suicide.

—Duke Charles Theodore, brother of the Empress of Austria, is an amateur oculist of unusual skill. He recently performed some difficult operations at the Munich eye clinic.

—Thomas Heap, a man who was convicted of causing death by attempting abortion upon a patient, he at the same time being illegally practicing as a surgeon, was hanged, lately, at Liverpool.

—The American Medical Association, at its last meeting, presented the Permanent Secretary, Dr. Wm. B. Atkinson, a sum of \$750, as a token of appreciation for his valuable official services.

—Dr. Samuel Mackenzie Elliott, a well known oculist, died May 8th, on Staten Island, aged 79. He commanded the Seventy-ninth (Scottish) Regiment at the beginning of the war, and assisted in raising the Highland Brigade.

—Dr. John Charles Bucknell, of England, the distinguished physiologist and author, is now on a visit to this country. Lately he was the guest of Dr. Kirkbride, of this city, and proposed attending the meeting of the Association of Superintendents of Hospitals for the Insane, at Auburn, N. Y., on the 18th instant.

Items.

—The following were elected officers of the Chester County Medical Society, at its recent annual meeting: President, Dr. Sumner Stebbin; Vice-presidents, Drs. Carey and Blakesdale; Censors, Drs. Thomas, Price and Edge; Treasurer, Dr. Isaac Massey; Corresponding Secretary, Dr. W. B. Brinton; Recording Secretary, Dr. E. Hopkins.

—At the meeting of the "Association of American Medical Editors," in Louisville, the following officers were elected for the ensuing year: President, Dr. Bell, editor of the "Sanitarian," of New York; Vice-President, Dr. Wood, Jr., editor "Philadelphia Medical Times;" Secretary, Dr. F. C. Davis, editor "Chicago Medical Examiner."

—The Jefferson Medical College, of this city, has lately made an extensive purchase of grounds adjacent to the College, with a view to erect a large hospital.

—The last report of the Board of Health of Berlin states the following general law for the winter mortality in that city—"the mortality in the six winter months rises and falls inversely as the thermometer."

—A squaw out West told her husband that she didn't think that she should ever feel any better unless he killed her doctor. The doctor was duly killed, and upon being tried for his murder, the chief was acquitted, on the ground that he acted in defense of his wife's life.

QUERIES AND REPLIES.

Dr. K., of Mo.—The following is the mixture used by Prof. Pancoast in surgical cases where he fears surgical fever:—

R. Aque camphorae,	fluid ounce ii
Spir. minderl.,	fluid ounce iss
Spir. eth. nit.,	fluid drachm ij
Antimonii tartaratae,	gr. ss
Morphiae acetat.,	gr. ss, or more, as
Ft. mist.	needed. M.

Sig. A tablespoonful every hour while awake.

Dr. Brehman.—The *Mirror* received. A scientific description of the monster would be interesting.

MARRIAGES.

FLETCHER—KENT.—In Strafford, Vt., April 14, by Rev. Henry Cummings, Frederick Fletcher, M.D., and Ella Kent.

GARNER—MARSHALL.—At St. Paul's Church, Baltimore, on Tuesday, April 27th, 1875, by the Rev. J. S. B. Hodges, Dr. H. G. Garner, of St. Mary's Co., Md., and Miss R. Roberta Marshall, only daughter of Charles H. Marshall, Esq., of St. Louis.

NEWSHAM—TASKE.—On the 12th inst., at the residence of the bride's parents, by Rev. W. C. Robinson, Dr. Stanley P. Newsham and Miss Mary E. Tasker, all of this city.

PAXSON—LONG.—On the 12th inst., by Friends' ceremony, at Attleboro, Pa., John Paxson, M.D., of Jenkintown, Montgomery county, and Tacy L. Long, of Philadelphia.

RICHÉY—MULLEN.—On Wednesday evening, April 28, at the residence of Mr. W. A. Applegate, Walnut Hills, by the Rev. J. G. Wright, Dr. W. S. Richey, of Chicago, and Miss Clara Mullen, of this city.

SCHMUCK—KIRBY.—At 9 o'clock Tuesday morning, May 4, at the residence of the bride's father, near Paris, Ill., by the Rev. W. L. Githens, of Grace Church, St. Louis, Mo., Dr. F. C. Schmuck and Miss Ella Kirby, both of Cincinnati, O.

DEATHS.

MCCREDY.—In this city, on the 27th ult., Dr. Jeremiah F. X. McCredy, aged 68 years.

SAAL.—On Wednesday, May 5, at 4 o'clock A. M., Dr. Gerhard Saal, aged 53 years.

SMITH.—At his residence, Milestown, 22d Ward, on May 5, Wilson B. Smith, M.D., in his 84th year.